

factors and accounted for \$186 million or 8% of 2004 Indiana Medicaid expenditures.

PMH19

A COMPARISON OF TOTAL DIRECT MEDICAL COSTS TO MANAGED CARE OF ESCITALOPRAM VERSUS VENLAFAXINE XR TREATMENT IN MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: To compare from a managed care perspective the total direct medical costs of escitalopram (a selective serotonin reuptake inhibitor) and venlafaxine XR (a serotonin-norepinephrine reuptake inhibitor) as the first-line therapy for major depressive disorder (MDD). **METHODS:** A cost minimization model that assumes no differences in study clinical outcomes was developed, based on data from a randomized, double-blind, fixed dose clinical trial of escitalopram 20 mg/day (n = 98) and venlafaxine XR 225 mg/day (n = 100). Office visits required to treat adverse events and to manage switching for patients who drop out were modeled. Treatment costs for AEs and office visit costs were taken from the literature and professional opinion. Costs for escitalopram and venlafaxine XR were assumed at average wholesale price (AWP), discounted 20% for managed care organizations, \$2.81/day (20 mg) and \$3.83/day (150 mg), respectively; the costs for concomitant medications were obtained from the Red Book (2006) and drugstore.com. **RESULTS:** There were statistically significantly more dropouts due to AEs with venlafaxine-XR than with escitalopram (16% and 4%, respectively; $P < 0.01$). According to this cost minimization model, treatment costs per patient with escitalopram are \$227 vs. \$301 with venlafaxine XR. This cost saving of 25% for escitalopram was obtained due to lower drug costs (\$93 vs. \$156 per patient), lower AE costs (\$14 vs. \$19 per patient) and lower drug switching cost (\$39 vs. \$63 per patient). One-way sensitivity analysis assuming either no AE withdrawals, or no AEs in the venlafaxine XR treatment arm, showed escitalopram treatment results in cost savings of 19% and 20%, respectively. **CONCLUSION:** Based on this analysis, switching 100 MDD patients treated with venlafaxine XR to escitalopram offers costs savings to managed care, estimated at \$7475. These cost savings could be used to treat 33 additional patients with escitalopram at an average total cost of \$227 per patient.

PMH20

THE ECONOMIC COSTS TO MANAGED CARE ORGANIZATIONS OF EXCESS MD WITHDRAWAL FROM DULOXETINE TREATMENT: AN OPPORTUNITY COSTS MODEL

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OBJECTIVES: Formulary decisions by managed care organizations (MCOs) can affect choice of drug treatment for major depressive disorder (MDD). Drugs with poor tolerability may impact cost of treatment due to treatment withdrawal; however, the direct costs to MCOs of withdrawal from treatment have rarely been estimated. The objective of this study was to estimate the opportunity costs associated with excess patient withdrawal with duloxetine versus escitalopram treatment from an MCO perspective. **METHODS:** An opportunity cost model was constructed to estimate the cost of treatment withdrawals from a prospective randomized clinical trial comparing escitalopram (10–20 mg/day, n = 137) and duloxetine (60 mg/day, n = 133). Proportional hazard analysis of patient disposition demonstrated a 28% excess risk of withdrawal in the duloxetine arm after 8

weeks of treatment. The model assumes that all resources used by patients who withdraw are wasted: 30 days of initial treatment drug supplies, costs of switching to another drug, and treatment of AEs for withdrawn patients. The model is based on 100 patients/arm and calculates the costs associated with 28 cases of excess withdrawals. Treatment costs for AEs were taken from the literature and professional opinion. Duloxetine costs were assumed at average wholesale price (AWP), discounted 20% for MCOs: \$3.84/day (60 mg); medications costs were obtained from the Red Book (2006) and drugstore.com. **RESULTS:** The total opportunity costs are approximately \$9000 (\$321 per withdrawn patient): \$2500, drug costs; \$4400, switching costs; and \$2000, treatment costs for AEs. One-way sensitivity analyses included accounting for three all-cause hospitalizations (total costs of \$22,800) increased mean opportunity cost to \$1135/withdrawn patient; assuming 50% reduction in switching costs resulted in mean opportunity costs of \$242/withdrawn patient and reducing drug supply to 15 wasted days lowered mean opportunity costs to \$275/withdrawn patient. **CONCLUSION:** Choosing treatments with excess patient withdrawals imposes an avoidable economic burden on MCOs.

PMH21

ANALYSIS OF DRUG TREATMENT PATTERNS, SERVICE USE AND COSTS ASSOCIATED WITH SPECIFIC PHARMACOLOGICAL TREATMENTS FOR MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: While controlling for relevant and possibly confounding variables this study examined antidepressant treatment patterns for Florida Medicaid recipients with a diagnosis of MDD. The objective was to identify the types of antidepressant medication being prescribed including tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), serotonin and nor-epinephrine reuptake inhibitor (SNRIs) (e.g. Venlafaxine and Duloxetine) and Bupropion. Dosage patterns and the factors that predict service use and costs among recipients of antidepressant therapy were analyzed. **METHODS:** The sample included 25,306 patients with a diagnosis of MDD who were enrolled in the Florida Medicaid Program during FY03-05. The research used three years of Medicaid claims data to compare patient demographics, diagnostic characteristics, antidepressant medication use, index dosage and service expenditure patterns 6 months prior to and one year after the index prescription event for antidepressant medication users. **RESULTS:** Among those persons diagnosed with MDD, the majority (84.5%) received SSRIs alone or in combination with other antidepressants, 29.2% received SNRIs alone or in combination with other antidepressants and 15.3% received TCAs alone or in combination with other antidepressants. A large majority (86.5%) were also receiving prescription pain medication. Of these, more than half were receiving prescription narcotics. Predictors of increased service use and cost following initiation of antidepressant treatment included older age, female sex, and pre-index prescription costs. Results showed that physical health care costs increased after switching to any antidepressant, however behavioral health costs tended to decrease for all treated patients overtime with the most dramatic decreases occurring in inpatient services. **CONCLUSION:** Current data on patterns, predictors and outcomes of antidepressant medication provided to patients with MDD are important to understand the care provided, promote optimal clinical practice and improve quality of care.